



FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
"OVER ONE HUNDRED YEARS OF SERVICE"

310 Hubert St., Raleigh, NC 27603
Telephone: (919) 828-3441
FAX No.: (919) 828-5751

RECEIVED
N.C. Dept. of EHNR

JUL 17 1996

Winston-Salem
Regional Office

June 24, 1996

Mr. Alan Sanders
NCDEHNR-Division of Forest Resources
P. O. Box 29581
Raleigh, North Carolina 27626-0581

Subject: UST Closure Assessment at NC Forest Resources
Route 16, Box 272 (Hargrave Road)
Lexington, Davidson County, North Carolina

Dear Mr. Sanders:

As requested by the NCDEHNR-DEM Winston-Salem Regional Office in a letter dated May 28, 1996, Froehling & Robertson, Inc. (F&R) personnel sampled beneath UST-1 and UST-3 at the above referenced site.

The DEM letter requested that samples be obtained beneath the aforementioned USTs and tested by TPH Method 5030. On June 7, 1996, samples were obtained beneath each UST using a hand auger. During the sampling, all of the soil samples were scanned with a HNU photoionization detector (PID) unit. The PID scans were performed to help detect the presence of organic vapors in the soil samples. Soils samples from beneath the USTs were placed in glass jars which were tightly covered with foil. The tip of the PID was inserted through the foil into each jar and the total volatile organic concentrations were measured in parts per million (ppm).

Soil samples were collected by F&R in accordance with current DEM protocol. The soil samples were obtained from the hand auger using disposable latex gloves. The hand auger was decontaminated in accordance with DEM specifications and the latex gloves were changed prior to obtaining each sample. All of the soil samples were immediately placed in pre-cleaned glass jars with vapor/fluid tight teflon lids. The jars were completely filled before capping.

HEADQUARTERS: 3015 DUMBARTON ROAD • BOX 27524 • RICHMOND, VA 23261-7524
TELEPHONE (804) 284-2701 • FAX (804) 284-1202

BRANCHES: ASHEVILLE, NC • BALTIMORE, MD • CHARLOTTE, NC • CHESAPEAKE, VA
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All of the samples were stored on ice in a cooler and shipped overnight to the chemical analysis laboratory. EPA recommended chain-of-custody procedures were maintained throughout the sampling and analysis program. The complete chain-of-custody record is attached.

UST Results

One soil sample was obtained below each end of former UST-1 and UST-3 at a depth of 1.5 to 2 feet using a hand auger. The soil samples were subjected to chemical analysis for TPH Low Boiling Point fuels (TPH 5030) as directed by DEM personnel. There was no obvious olfactory evidence of soil contamination detected in the samples obtained beneath the USTs. The analytical chemical test results are attached. The sample locations are shown on Drawing No.

1. A summary of the field and laboratory results is as follows:

| UST 1 - 1,000 GALLON DIESEL | | | | | |
|-----------------------------|--------------|----------|--------|-----------|-----------------------|
| Lab Sample | Field Sample | Location | Depth* | PID (ppm) | TPH Method 5030 (ppm) |
| 9606058-01 | UST1-1 | N. End | 8' | 0 | <5 |
| 9606058-02 | UST1-2 | S. End | 8' | 0 | <5 |

| UST 3 - 1,000 GALLON FUEL OIL | | | | | |
|-------------------------------|--------------|----------|--------|-----------|-----------------------|
| Lab Sample | Field Sample | Location | Depth* | PID (ppm) | TPH Method 5030 (ppm) |
| 9606058-03 | UST3-1 | N. End | 8' | 0 | <5 |
| 9606058-04 | UST3-2 | S. End | 8' | 0 | <5 |

* Below existing grade



Conclusions

Based on the field (PID) and analytical chemical results from the soil samples obtained beneath UST-1 and UST-3, it does not appear that there was a release from these USTs to the surrounding soil. We recommend no further action at this site.

Limitations

This report has been prepared for the exclusive use of the Division of Forest Resources and/or their assignees. This report has been prepared in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. F&R by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state or federal public agencies any conditions at the site that may present a potential danger to public health, safety or the environment.

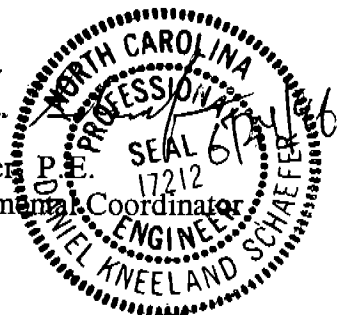
F&R appreciates the opportunity to have served as your environmental consultant on this project. If you have any questions regarding this report or if we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

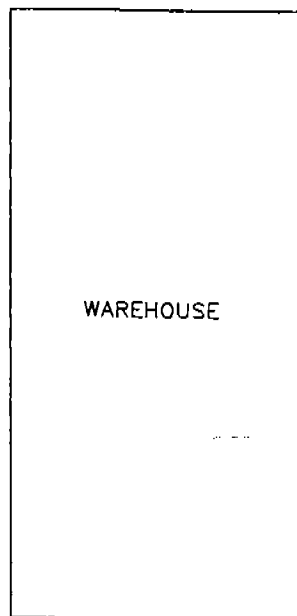
FROEHLING & ROBERTSON, INC.

Michael J. Burns
Staff Geologist

Daniel K. Schaefer, P.E.
Regional Environmental Coordinator



MJB/DKS/pg



WAREHOUSE

PIPING

UST NO. 3

9606058-03

9606058-04

LIMITS OF UST EXCAVATION

PUMP ISLAND

9606058-02

PRODUCT PIPING

LIMITS OF UST EXCAVATION

UST NO. 1

9606058-01

UST NO. 2



WOOD SHOP

COOLER



FROEHLING & ROBERTSON, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS
ENGINEERS • LABORATORIES
RALEIGH, NC

| | | |
|------------|------------------------------|----------------|
| CLIENT: | DIVISION OF FOREST RESOURCES | |
| PROJECT: | DAVIDSON COUNTY OFFICE | |
| LOCATION: | LEXINGTON, NORTH CAROLINA | |
| DRAWN: | MB | |
| CHECKED: | | |
| DATE: 6/96 | SCALE: 1" = 30' | DRAWING No.: 1 |



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CERTIFICATE OF ANALYSIS

June 14, 1996

Page 1 of 1

LAB #: 9606058
CLIENT: F&R Raleigh
Attn: Michael Burns

PROJECT: DFR-Lexington

SAMPLES COLLECTED BY: M. Burns
LAB RECEIPT: 06/11/96, 1000

| <u>PARAMETER</u> | <u>ANALYSIS DATE/TIME</u> | <u>METHOD</u> | <u>ANALYST</u> |
|------------------|---------------------------|-----------------|----------------|
| TPH-GC Low BP | 06/13/96, 0902 | SW846/5030/8015 | KR |

RESULTS:

| | | | | |
|------------|----------------|----------------|----------------|----------------|
| F&R #: | 9606058-01 | 9606058-02 | 9606058-03 | 9606058-04 |
| SAMPLE ID: | UST-1, N. End | UST-1, S. End | UST-3, N. End | UST-3, S. End |
| DATE/TIME: | 06/07/96, 1307 | 06/07/96, 1332 | 06/07/96, 1347 | 06/07/96, 1358 |
| TYPE: | Soil/Grab | Soil/Grab | Soil/Grab | Soil/Grab |

Det'n
Limit:

| | | | | | |
|-----------------------|-----|-----|-----|-----|---|
| TPH-GC Low BP (mg/kg) | BDL | BDL | BDL | BDL | 5 |
|-----------------------|-----|-----|-----|-----|---|

mg/kg = milligram per kilogram BDL = Below Detection Limit

Note: Soil results reported on dry weight basis unless otherwise noted.

Audrey N. Brubeck
Laboratory Supervisor

AB/psg

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RALEIGH, NC • ROANOKE, VA • STERLING, VA • WINSTON-SALEM, NC



CHAIN OF CUSTODY RECORD

Please Print CLIENT
ADDRESS

FRB Paley, Inc.
310 Hubert St.
Paley, AL 27603
Michael Burns
(919) 828-3441 / 5751

FROEHLING & ROBERTSON, INC.
 P.O. BOX 27524
 RICHMOND, VIRGINIA 23261
 TEL: (804) 264-2701
 FAX: (804) 264-1202

ATTN
PHONE/FAX

LAB PROJECT # PROJECT NAME/NUMBER - Please Print

9606058 DFB-LEXINGTON

SAMPLED BY - Please Print

Michael Burns

| LAB I.D. | DATE | TIME | GRAB | COM | SAMPLE IDENTIFICATION - Please Print |
|----------|--------|------|------|-----|--------------------------------------|
| -01 | 6/7/96 | 1:07 | X | | UFT-1 N.END |
| -02 | | 1:32 | X | | UFT-1 S.END |
| -03 | | 1:47 | X | | UFT-3 N.END |
| -04 | | 1:58 | X | | UFT-3 S.END |

REQUESTED TEST PARAMETERS

Please Print

| C | SAMPLE |
|------|----------|
| # OF | (MATRIX) |
| 1 | Soil |
| 1 | Soil |
| 1 | Soil |
| 1 | Soil |

5030

FIELD COMMENTS: Please Print

RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED BY DATE TIME

Michael Burns 6/10/96 9:50 *Michael Burns* 6/11/96 1000

RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED BY DATE TIME

RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED FOR LAB BY DATE TIME

SHIPPED VIA *UPS* DATE *6/10/96*

pH _____ TEMP. *19°C*